



Testimony to the CGA Joint Committee on the Environment
Testimony by Citizens Campaign for the Environment
Louis W. Burch, Program Coordinator

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Senator Meyer, Representative Gentile, distinguished members of the Environment Committee, thank you for the opportunity to speak today.

My name is Louis Burch, program coordinator for Citizens Campaign for the Environment (CCE). Supported by over 80,000 members in Connecticut and New York State, CCE works to empower communities and advocate solutions that protect public health and the natural environment. CCE would like to offer the following testimony:

HB 5307- AAC the Use of Booms for the Retention of Certain Oils and Revising Certain Requirements for the Registration of Radioactive Materials (OPPOSED)

CCE is opposed to HB 5307 on the grounds that it would ease regulations intended to protect the Long Island Sound and its sensitive ecosystem from contamination during dangerous oil spills. As an *Estuary of National Significance*, the immense value of this resource cannot be overstated. Long Island Sound is a vital recreational, tourist and economic resource to Connecticut and New York, generating over \$8.5 billion in annual revenue for the local economy.

The proposed legislation would amend the current state law requiring booming of ships and barges during the transfer of oil and gasoline. Gasoline spills pose a significant threat to aquatic life and public safety, and need to be addressed quickly to prevent devastating impacts to our harbors and shared waterways. In the absence of booming, gasoline could migrate throughout a water body, making contact with unsuspecting boaters and exacerbating an already serious safety hazard. Booming of gasoline and other petroleum products insures that any spills are contained and can be treated properly.

Containing gasoline spills within a safety boom not only serves to protect marine life by limiting the spread of harmful, highly combustible materials, it also helps ensure that anyone in the vicinity of a spill is aware of the danger and takes appropriate safety precautions. **CCE is supportive of existing regulations requiring booming of gasoline and respectfully urges the Environment Committee to reject this legislation.**

HB 5308- AAC the Regulation of Fracking Waste (CONDITIONALLY SUPPORTIVE)

Hazardous waste products from industrial oil and gas development are toxic, potentially carcinogenic and radioactive, and pose inherent risks to ground and surface water resources, wastewater infrastructure, and most importantly, the health of our communities.

Contaminated fracking fluids that return to the surface during the drilling process can contain a virtual laundry list of toxic chemicals. An independent analysis revealed that of the chemicals used in gas drilling, 50% could cause brain damage, 37% could affect the endocrine system, and 25% could cause cancer or mutations. These chemicals include, but are not limited to formaldehyde, methanol, ethylene glycol, diesel fuel, hydrochloric acid, ethyl benzene, and toluene.¹

Hazardous waste from fracking operations can also contain high levels of Naturally Occurring Radioactive Materials (NORMs), including Radium-226, which has a half life of over 1,600 years. Radon (a decay product of Radium-226) is the leading cause of cancer among non-smokers, and Radium-226 is linked to bone, liver and breast cancer. The radioactivity of flowback fluids from vertical wells drilled in New York's Marcellus Shale were found to exceed Safe Drinking Water Act Standards by up to 320,500%.²

Unfortunately, exploration and production waste from oil and gas fields are exempt from consideration as hazardous waste under federal standards (RCRA Subtitle C). This *hazardous waste loophole* allows gas companies to transport and dispose of toxic fracking waste products without categorizing it as hazardous waste and handling or treating it as such. This process leaves communities vulnerable to exposure to a range of toxic substances, as traditional sewage treatment plants and industrial waste treatment facilities are not designed to remove or treat hazardous waste.

Closing the federal hazardous waste loophole is a critically important step in the overarching strategy to safeguard the health of Connecticut's communities, but it is insufficient to provide adequate protections on its own. **CCE supports HB 5308, and urges the committee to amend the bill to include liquid waste as well as solid waste.**

SB 237- An Act Prohibiting the Storage and Disposal of Fracking Waste in Connecticut (SUPPORTIVE)

The extraction of natural gas using hydraulic fracturing (fracking) produces large amounts of liquid and solid waste that can contain a number of harmful pollutants, including salts; chemical additives, such as ethylene glycol, naphthalene, and sulfuric acid; metals; organic compounds; and other contaminants. These pollutants include chemical additives in fracking fluid, as well as naturally-occurring contaminants that exist thousands of feet below the surface and are mobilized by the extraction process and come up the well along with drilling muds (used as a lubricant during the drilling process), fracking fluids, and the gas itself. Fracking waste from extraction activities in the Marcellus Shale can also contain naturally-occurring radioactive materials (NORMs) such as radium-226 and radium-228.

¹ Colborn T, Kwiatkowski C, Schultz K, and Bachran M. 2011. Human & Ecological Risk Assessment

² NYS Department of Environmental Conservation SGEIS, Appendix XIII

Production brine from fracking can be used on roads for de-icing, dust control, and road stabilization purposes. This waste can run off into adjoining property and ultimately could contaminate rivers, streams, and underground aquifers that feed local drinking water supplies.

Fracking wastewater headed to sewage treatment facilities can carry any of the previously mentioned chemical constituents as well as high levels of salts and radioactive material. Most sewage treatment facilities are not equipped to adequately treat and dispose of this toxic cocktail.

Evidence from Pennsylvania has demonstrated that fracking wastewater can wreak havoc if sent to certain municipal wastewater treatment plants, causing equipment corrosion and water pollution. A 2011 investigative report from The New York Times showed that over a three-year period in Pennsylvania the industry sent more than a billion gallons of fracking wastewater to treatment plants unequipped to handle it, causing the plants to discharge the partially treated wastewater into Pennsylvania's waterways. A study from Duke University examined discharged effluent and downstream water quality from a wastewater treatment facility accepting fracking wastewater in western Pennsylvania. Researchers found increased downstream concentrations of chloride and bromide, and reported that, while radioactive concentrations in effluent were largely reduced, they were not eliminated, meaning that radioactivity could accumulate over time at the point where treated wastewater is discharged. In fact, researchers found that radioactivity concentrations in sediment at the point of discharge were 200 times higher than upstream sediment concentrations.

In addition to concerns around acceptance of fracking wastewater, there have been media reports that some wastewater treatment facilities are currently receiving leachate (liquid that drains from a landfill and can pick up contaminants contained in the landfill waste) from landfills which accept fracking solid waste.

Drill cuttings, sludge, fracking sand, and other waste materials from fracking are sent to landfills for disposal. The contaminants found in fracking are also present in these materials and can lead to concentrated levels of contamination.

The hazardous of fracking waste are clear, and fracking produces millions of gallons of this toxic waste at every well. Connecticut is not prepared to deal with this waste and needs to take action to protect its citizens, communities and natural resources from this hazardous waste. **CCE strongly supports SB 237, and respectfully urges this committee to pass this legislation as soon as possible.**

SB 67- AAC the Inclusion of Juices, Teas, and Sport Drinks under Connecticut's Bottle Bill (SUPPORTIVE)

Connecticut's bottle deposit law was created in 1980 with the goal of incentivizing recycling and reducing litter. The "Bottle Bill" only applied to beer and soda bottles, as these were the most common plastic bottles in circulation at the time. That law was updated in 2009 to include bottled water, but ignored the wide range of juice drinks, sports and energy drinks, and teas that have surged in popularity in recent years.

The Bottle Bill has been tremendously effective in increasing recycling rates in Connecticut; approximately 70% of bottles and cans covered by the bottle bill are recycled. Currently, roughly 25% of containers not covered by the law are recycled in our state. CCE believes that the expansion of the bottle deposit law to include juices, teas, and sports drinks is an important step in the right direction, but also supports inclusion of energy drinks, coffee beverages, and other single serving beverage containers. In conclusion, **CCE supports increasing incentives for recycling all single serving beverage containers and respectfully urges this committee to support passage of SB 67.**

On behalf of our members in Connecticut, we appreciate the opportunity to provide testimony and look forward to working with you on these important issues.